

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of )

Advanced Television Systems )  
and Their Impact upon the )  
Existing Television Broadcast )  
Service )

MM Docket No. 87-268

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To: The Commission

**COMMENTS OF THE COUNTY OF LOS ANGELES**

The County of Los Angeles ("County"), by its attorneys, hereby submits the following comments in response to the Commission's Sixth Further Notice of Proposed Rulemaking ("6<sup>th</sup> FNPRM") in the above-captioned "Advanced Television Systems" proceeding, FCC 96-317, released August 14, 1996.

**Introduction and Summary**

Through the more efficient use of existing television broadcast spectrum, the Commission has proposed a digital television ("DTV") channel allotment plan under which significant spectrum will be available for non-broadcast use, including specifically "to meet public safety" needs. 6<sup>th</sup> FNPRM, ¶26. These comments address this aspect of the Commission's proposal which the County strongly supports.

With a population of over 9 million citizens in an area of about 4,000 square miles that includes such varied terrain as the densely populated Los Angeles Basin, mountain peaks and valleys, islands, and deserts, the County is responsible for the provision of extensive public safety services, including the Sheriff's Department, Fire Department, and Emergency Medical

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Services Agency. All are heavily dependent upon highly sophisticated communications systems to provide essential public safety services to County residents. The County operates extensive wide-area land-mobile radio systems for its operations which utilize frequencies in the UHF, VHF, and 800 MHz bands. In addition, the County's public safety communications systems depend on a complex network of microwave links to provide necessary infrastructure.

As the Commission is well aware, the Los Angeles basin region is one of the most, if not the most, spectrum congested area in the United States. Many government entities in Southern California have a substantial need for additional spectrum to modernize overburdened communications systems, to provide enhanced interoperability, and to allow for the implementation of new communications technologies. To the extent the Commission's proposed DTV channel allotment plan, including specifically the proposed reallocation of UHF Television channels 60-69 for non-broadcast uses, will provide an adequate amount of spectrum to address these critical public safety needs, the County supports the Commission's proposal. However, the County also supports the suggestion made in APCO's comments that the Commission modify the DTV "core spectrum" to allow for eventual public safety use of VHF channel 7, and to facilitate additional land mobile sharing of UHF channels 14-20 (which are already heavily used for public safety in the Los Angeles area).

In the County's view, the proposed allotment plan is the logical outgrowth of the Commission's long standing efforts to promote greater spectrum efficiency by all users, including broadcasters. In the land mobile area, for example, the basic channel available to public safety users has been split several times over the past several decades, reducing

bandwidth in some cases from 120 kHz to 12.5 kHz to promote more efficient use.<sup>1</sup>

While the basic TV channel has never been split, the Commission historically has provided for the sharing of unused television spectrum by other users, including the public safety community.

In its initial television spectrum sharing proceeding, Docket 18261, the Commission reallocated 12 MHz of lower UHF spectrum (2 TV channels) between TV channels 14-20 for use by land mobile communications systems in the ten largest U.S. cities.<sup>2</sup> In so doing, the Commission affirmed that its action permitting sharing of the channels by broadcasters and land mobile systems would “substantially increase the utilization of those frequencies,” while providing much-needed spectrum relief to land mobile users.<sup>3</sup> In the Los Angeles area, channels 14 and 20 were allocated for land mobile use, and currently support thousands of public safety and other radio systems.<sup>4</sup> In 1986, in recognition of the unique situation in the Los Angeles basin area, the Commission took the additional step of reallocating UHF channel 16 in Los Angeles from broadcasting for

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<sup>1</sup> See Refarming Notice of Inquiry, FCC Rcd 4126, 4151 (1991); Refarming Report & Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd 10076 (1995).

<sup>2</sup> See Reallocation of UHF-TV Channels 14 through 20 to the Land Mobile Radio Services, First Report and Order, 23 FCC2d 325 (1970). The Commission later extended the number of cities where the spectrum would be available to the thirteen largest. See Further Sharing of the UHF Television Band by Private Land Mobile Services, Notice of Proposed Rulemaking, 101 FCC2d 852, 855-56 (1985).

<sup>3</sup> 23 FCC 2d at 337-38.

<sup>4</sup> Id. at 356.

exclusive public safety use.<sup>5</sup> This action was taken in response to the request of the Los Angeles County Sheriff's Department, which now uses Channel 16 frequencies to support its countywide public safety services. Numerous other public safety agencies in the Los Angeles area now also use the channel.

Further sharing opportunities for private land mobile systems were also proposed in 1985.<sup>6</sup> At that time, the Commission proposed to make additional UHF-TV spectrum available for shared private land mobile use, including public safety, in eight large urban areas, including Los Angeles.<sup>7</sup> As before, this was premised on the Commission's public interest obligation to encourage the most efficient usage of the spectrum, and to provide additional frequencies to support the growing requirements of private land mobile radio services, specifically including public safety.<sup>8</sup> While that proceeding was later suspended in light of the commencement of this proceeding, the suspension was premised on the ultimate development of a spectrum-efficient DTV allotment plan under which unused

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<sup>5</sup> Allocation of Channels 16 for Public Safety Use, Report and Order, 59 RR 2d 910 (1986). Again citing non-efficient use of spectrum in the accompanying proceeding in Docket 18262, the Commission ordered TV translator stations cleared from channels 70-83 in the ten largest U.S. cities and shifted to below channel 69, so that the frequencies could be reallocated for exclusive use by land mobile systems. See Future Use of the 806-960 MHz Band, First Report and Order and Second Notice of Inquiry, 19 RR 2d 1663, 1666-1667 (1970).

<sup>6</sup> Further Sharing of the UHF Television Band by Private Land Mobile Services, Notice of Proposed Rulemaking, 101 FCC 2d 852 (1985).

<sup>7</sup> Id. at 852.

<sup>8</sup> Id.

television spectrum would be made available for other critically important uses.<sup>9</sup>

Accordingly, since the onset of this proceeding, the Commission has made efficient usage of the radio spectrum one of its principal public interest goals regarding the assignment of spectrum for, and the transition to, the new era of digital television.<sup>10</sup> In the Tentative Decision and Notice of Inquiry, the Commission particularly noted that, “our preference is for ATV systems that can provide satisfactory service using the least spectrum.”<sup>11</sup> Inherent in this goal is the fact that, through more efficient usage of television broadcast spectrum, the needs of television broadcasters to provide DTV service can be fully met, while freeing up unused spectrum for new uses by other entities, including the public safety community.<sup>12</sup>

From the public safety standpoint, the need for additional spectrum is greater than ever. This is especially true for public safety agencies located in the largest urban areas. Therefore, the County strongly supports the Commission’s general public interest goal in this proceeding to reclaim additional spectrum for reallocation to and use by public safety agencies.

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<sup>9</sup> See Further Sharing of the UHF Television Band by Private Land Mobile Radio Services, Order, 2 FCC Rcd 6441 (1987).

<sup>10</sup> See Advanced Television Systems, Notice of Inquiry, 2 FCC Rcd 5125, 5131 (1987).

<sup>11</sup> See Advanced Television Systems, Tentative Decision and Notice of Inquiry, 3 FCC Rcd 6520, 6531 (1988).

<sup>12</sup> Id.; See also Advanced Television Systems, Second Report and Order/Further Notice of Proposed Rulemaking, 7 FCC Rcd 3340, 3354 (1992); Advanced Television Systems, Fourth Further Notice of Proposed Rulemaking and Third Notice of Inquiry, 10 FCC Rcd 10540, 10549 (1995).

**I. A Significant Portion of Reallocated Channels 60-69  
Should be Made Available for Public Safety Use**

The County fully agrees with and supports the findings and recommendations contained in the recently completed Final Report of the Public Safety Wireless Advisory Committee ("PSWAC"), which was co-sponsored by the FCC and NTIA.<sup>13</sup> As documented by PSWAC, currently there is a serious shortage of available spectrum for use by public safety agencies to expand their communications systems, alleviate congestion, enhance interoperability and provide for the development of new technologies. To meet these serious public needs, the PSWAC Committee has recommended that the Commission act without further delay to:

- (i) allocate immediately 2.5 MHz of spectrum for interoperability;
- (ii) within five years, allocate an additional 25 MHz; and
- (iii) develop a comprehensive plan and commitment to provide an additional 70 MHz of spectrum for public safety use over the next 15 years.<sup>14</sup>

Of particular relevance to this proceeding, PSWAC has recommended that the Commission look to UHF channels 60-69 to meet the requirements for 25 MHz of additional public safety spectrum within five years.<sup>15</sup> That spectrum is adjacent to existing 800 MHz frequencies already utilized by many public safety agencies throughout Southern California

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<sup>13</sup> See Final Report of the Public Safety Wireless Advisory Committee, September 11, 1996, recently incorporated by reference into the "Public Safety Spectrum Requirements" proceeding, WT Docket No. 96-86. Personnel from the County's Sheriff's Department, Fire Department and Internal Services Department were active participants in the PSWAC proceedings.

<sup>14</sup> Id. at 3.

<sup>15</sup> Id.

and is well suited for public safety use. And as the Commission has tentatively concluded, the elimination of channels 60-69 from the DTV core spectrum would have minimal impact on current television broadcasters. Under the DTV spectrum allotment plan, virtually all existing stations can receive both a transition and permanent channel able to serve substantially the same area.

**II. In Fashioning the Final DTV Plan, the Potential for Immediate Public Safety Use of Channels 60-69 Should be Maximized**

As the 6<sup>th</sup> FNPRM recognizes, the proposed table of allotments needs to be designed to maximize the extent to which an adequate amount of spectrum in channels 60-69 will be available for immediate reallocation and use by public safety. While the allotment plan proposed in the 6<sup>th</sup> FNPRM is a laudable effort in this regard, the County believes that more can be done to assure the prompt availability of spectrum for public safety use. The overall objective of this aspect of the allotment plan should be to make at least four channels (24 MHz) in the 60-69 range available for public safety use in all large metropolitan areas. Consistent with the recommendation of the PSWAC Report, all 24 MHz should be made available over the next five years. To fulfill this objective, in the final design of the DTV allotment plan, the Commission must weigh the various allotment considerations (e.g., existing UHF stations, interim DTV assignments, existing low power/translator television stations and unused channel assignments) in such a way that will produce a minimum of four vacant UHF channels in all large metropolitan areas available for use by public safety agencies no more than five years from now.

To this end, in particular, the Commission must avoid the placement of any new DTV allotments in UHF channels 60-69 to the maximum extent possible. For example,

the proposed table includes new (albeit temporary) DTV stations on channel 60 in Los Angeles, channel 67 in Ontario, and channel 66 in Santa Ana. Those new allotments, coupled with current NTSC stations on channel 68 in Los Angeles, channel 63 in Ontario, and channel 62 in Riverside would significantly limit the immediate public safety use of channels 60-69 in the Los Angeles area.<sup>16</sup> Yet, it is areas such as Los Angeles that are in the greatest need of additional spectrum.

In order to facilitate both the transition from NTSC to DTV, and the prompt recovery of spectrum for new uses, the Commission should also eliminate all existing commercial and noncommercial NTSC vacant channel allotments. By eliminating existing unused allotments, the Commission will be able to maximize the number of DTV allotments for existing stations in both the commercial and non-commercial services, and more effectively free up spectrum for new uses.

The County also supports the Commission's proposal to continue the current secondary status to Low Power TV ("LPTV") and TV Translator stations. In the past, the Commission has made clear that LPTV and TV Translator stations are licensed on only a secondary basis, subject to possible cessation of service.<sup>17</sup> Under no circumstances should the Commission now require that public safety agencies compensate such secondary LPTV and TV translator licensees to terminate operation or relocate to other spectrum. Similarly, if the Commission recovers spectrum from existing NTSC licensees

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<sup>16</sup> See 6<sup>th</sup> FNPRM at Appendix B-7 through B-9. In addition, there is the possibility that the existence of current NTSC channel 64 in Barstow, and channel 69 in San Diego, could contribute to this problem.

<sup>17</sup> Low Power Television Broadcasting and Television Translators, Report and Order, 51 RR 2d 480, 488 (1982).



located between UHF channels 60-69, and reallocates portions of that spectrum for public safety use, it should not burden public safety agencies with the cost of relocating those licensees to new DTV channels in the core spectrum area. The Commission cannot justify payment of any relocation costs by public safety agencies. Public tax supported entities simply do not have the resources to pay relocation costs for commercial broadcast entities. In fashioning its policies, the Commission has traditionally recognized the budgetary constraints of publicly funded agencies. The County urges the Commission not to deviate from this standard now.

### **III. Existing Public Safety Systems Operating on Shared Channel 14-20 Frequencies Should be Fully Protected from Interference**

Obviously, all current land mobile operations on UHF channels 14-20 in Los Angeles and other areas must be fully protected from interference. This is a potentially mutual problem in which destructive interference can harm both the broadcaster and public safety user. The County is particularly concerned with a proposed DTV allotment of channel 15 which is nearly co-located with adjacent channel land mobile public safety operations utilized by the County. DTV channel 15 is proposed to be allotted for current NTSC channel 52, allotted to Corona, California. The current channel 52 transmitter is located atop Mt. Wilson, just 2.2 miles from a current channel 16 land mobile radio base station used by the County Sheriff's Department communications system. This poses a significant danger of harmful interference both to vital public safety communications and to the television service to be provided over the channel. In addition to interference to nearby land mobile sites, the County is also concerned about the potential for interference to other fixed and mobile transmitter sites located throughout the Los Angeles Basin,

which are clearly in the "line of sight" of Mt. Wilson and the proposed adjacent channel DTV transmitter. Therefore, the DTV allotment of channel 15 for NTSC channel 52 in Corona must be changed to protect public safety operations.

### **Conclusion**

The Commission has a long-standing public interest obligation to ensure that the spectrum needs of public safety agencies are being met. This proceeding provides a long-awaited opportunity for the Commission actually to take substantial action in furtherance of this important obligation. The County urges the Commission to proceed swiftly in the recovery and reallocation of spectrum made available as a result of the Commission's DTV allotment plan for use by public safety agencies.

Respectfully submitted,

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